

CLAIMS

Claim 1 (Previously Presented) An information management apparatus for managing service-related information in a system having a plurality of electronic apparatuses linked therein via network, the electronic apparatuses being for working in liaison with each other to implement a desired service, the information management apparatus comprising:

a service-specific information acquisition section for acquiring service-specific information which (i) is related to a combination of types of electronic apparatuses required for implementing a service and (ii) contains information related to an application that is operable on each of the electronic apparatuses which implement the service and used for implementing the service;

a storage section for storing at least one piece of service-specific information acquired by the service-specific information acquisition section;

an apparatus-specific information acquisition section for acquiring apparatus-specific information related to each electronic apparatus of the system;

a request reception section for receiving search requests from the electronic apparatuses;

a search section for searching for the service which can be implemented by the electronic apparatuses of the system, the searching being (i) conducted in response to a search request received by the request reception section, and (ii) based on the service-specific information stored in the storage section and the apparatus-specific information acquired by the apparatus-specific information acquisition section;

a transmission section for transmitting, to the electronic apparatuses of the system, a search result which identifies a listing of services which can be implemented by the electronic apparatuses of the system; and

an update notification section for notifying the electronic apparatuses of the system that an updated version of the application, that is operable on each of the electronic apparatuses which implement the service, exists, if the stored service-specific information includes information related to the application that, based on the search result, indicates that an updated version of the application is available.

Claim 2 (Cancelled)

Claim 3 (Cancelled)

Claim 4 (Previously Presented) The information management apparatus according to claim 1, further comprising an application acquisition section for acquiring the updated version of the application if the information related to the application indicates that an updated version of the application is available, wherein, when the electronic apparatuses are notified of the updated version of the application, the transmission section is adapted to transmit the updated version of the application to the electronic apparatuses if the electronic apparatuses provide the transmission section with a notice to download the updated version of the application.

Claim 5 (Cancelled)

Claim 6 (Previously Presented) The information management apparatus according to claim 1, wherein:

the apparatus-specific information acquisition section is adapted to acquire apparatus-specific information associated with the electronic apparatuses from the electronic apparatuses; and

the service-specific information acquisition section is adapted to acquire the service-specific information from a server which is for managing the service-specific information and which is present on the network.

Claim 7 (Previously Presented) The information management apparatus according to claim 6, further comprising:

an inquiry section for inquiring of the server whether the service-specific information stored in the storage section has been updated; and

a notification section for notifying the electronic apparatuses that the service-specific information has been updated if a result of the inquiry by the inquiry section indicates that the service-specific information has been updated.

Claim 8 (Previously Presented) The information management apparatus according to claim 7, wherein the inquiry section is adapted to make an inquiry to the server at regular intervals.

Claim 9 (Previously Presented) The information management apparatus according to claim 7, further comprising an update section for updating the service-specific information stored in the storage section if a result of the inquiry by the inquiry section indicates that the service-specific information has been updated.

Claim 10 (Previously Presented) The information management apparatus according to claim 1, wherein:

the apparatus-specific information acquisition section is adapted to acquire apparatus-specific information associated with the electronic apparatuses from the electronic apparatuses; and

the service-specific information acquisition section is adapted to acquire the service-specific information from the electronic apparatuses.

Claim 11 (Previously Presented) The information management apparatus according to claim 1, wherein:

the service-specific information related to the combination of the types of the electronic apparatuses is related to a combination of models of the electronic apparatuses;

the information management apparatus further comprises a specification section which is adapted to (i) refer to the service-specific information stored in the storage section and related to the service to be implemented by the electronic apparatuses, and (ii) specify a model of one electronic apparatus which works in liaison with another electronic apparatus to implement the service; and

the transmission section is adapted to transmit information which identifies the electronic apparatuses specified by the specification section to the electronic apparatuses which are used to implement the service.

Claim 12 (Previously Presented) The information management apparatus according to claim 1, further comprising:

a cease confirmation section for confirming the presence or absence of a ceased service corresponding to the service-specific information stored in the storage section; and

a request section for requesting the electronic apparatuses storing an application which corresponds to the ceased service to delete the stored application if the cease confirmation section determines that a ceased service exists among services corresponding to the service-specific information stored in the storage section.

Claim 13 (Previously Presented) The information management apparatus according to claim 1, further comprising:

a cease confirmation section for confirming the presence or absence of a ceased service corresponding to the service-specific information stored in the storage section; and

a deletion section for deleting the service-specific information, which corresponds to a ceased service, from the storage section if the cease confirmation section determines that a ceased service exists among services corresponding to the service-specific information stored in the storage section.

Claim 14 (Previously Presented) The information management apparatus according to claim 1, further comprising:

an apparatus-specific information storage section for storing the apparatus-specific information acquired by the apparatus-specific information acquisition section; and

an information deletion section for deleting the apparatus-specific information stored in the apparatus-specific information storage section in response to a request from the electronic apparatuses.

Claim 15 (Previously Presented) The information management apparatus according to claim 14, wherein, in response to the request from the electronic apparatuses, the information deletion section is adapted to delete the apparatus-specific information while deleting service-specific information related to services for which the electronic apparatuses, which correspond to the deleted apparatus-specific information, are used from among service-specific information related to services which can be implemented by the electronic apparatuses.

Claim 16 (Previously Presented) The information management apparatus according to claim 1, wherein:

when an additional electronic apparatus is newly added to the system, the apparatus-specific information acquisition section is adapted to acquire, from the additional electronic apparatus, information related to a user of the additional electronic apparatus together with the apparatus-specific information; and

the information management apparatus further comprises:

a user information management section for managing user-related information;

a user authentication section for determining whether to register the apparatus-specific information acquired by the apparatus-specific information acquisition section using (i) the user-related information managed by the user information management section and (ii) the user-related information acquired by the apparatus-specific information acquisition section; and

an apparatus-specific information storage section for storing the apparatus-specific information acquired by the apparatus-specific acquisition section if the user authentication section determines to register the apparatus-specific information.

Claim 17 (Previously Presented) The information management apparatus according to claim 1, further comprising:

an apparatus-specific information storage section for storing apparatus-specific information transmitted from and associated with the electronic apparatuses; and

an apparatus determination section for determining whether the apparatus-specific information corresponding to the electronic apparatuses associated with the service-specific information obtained by the search section is stored in the apparatus-specific information storage section.

Claim 18 (Previously Presented) The information management apparatus according to claim 17, further comprising an absent electronic apparatus notification section for notifying the electronic apparatuses, which have provided a search request, of the type of the electronic apparatus corresponding to the apparatus-specific information which is not stored in the apparatus-specific information storage section if the apparatus determination section determines that the apparatus-specific information corresponding to a type of an electronic apparatus associated with the service-specific information obtained by the search section is not stored in the apparatus-specific information storage section.

Claim 19 (Previously Presented) The information management apparatus according to claim 17, wherein, if the apparatus determination section determines that the apparatus-specific information corresponding to a type of the electronic apparatus associated with the service-specific information obtained by the search section is not stored in the apparatus-specific

information storage section, then the storage section does not store the service-specific information obtained by the search section.

Claim 20 (Previously Presented) An information management method of using an information management apparatus for managing service-related information in a system having a plurality of electronic apparatuses linked therein via a network, the electronic apparatuses being for working in liaison with each other to implement a desired service, the information management method comprising:

acquiring service-specific information which (i) is related to a combination of types of electronic apparatuses required for implementing the service and (ii) contains information related to an application that is operable on each of the electronic apparatuses which implement the service and used for implementing the service;

storing, in a storage section, the service-specific information acquired by the acquiring of the service-specific information;

acquiring apparatus-specific information related to each electronic apparatus of the system;

receiving a search request from the electronic apparatuses;

searching for the service which can be implemented by the electronic apparatuses of the system, the searching being (i) conducted in response to the search request received by the receiving of the search request, and (ii) based on the service-specific information stored in the storage section and the apparatus-specific information acquired by the acquiring of the apparatus-specific information;

transmitting, to the electronic apparatuses of the system, a search result (i) obtained by

the searching for the service and (ii) which identifies a listing of services which can be implemented by the electronic apparatuses of the system; and

notifying the electronic apparatuses of the system that an updated version of the application, that is operable on each of the electronic apparatuses which implement the service, exists, if the stored service-specific information includes information related to the application that, based on the search result, indicates that an updated version of the application is available.